

# **TView Micro**

## **User's Guide**

**Rev. 04/02**

## FCC NOTICE

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the installation manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- This unit was tested with shielded cable. Therefore, for continued compliance, use the shielded cables provided with the unit.
- Re-orient or relocate the unit or receiving antenna.
- Increase the separation between the computer/converter and television.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may find the following booklet helpful:

*How to Identify and Resolve Radio-TV Interference Problems (stock number 004-000-000345-4)*

To order the booklet, write to:

The U.S. Government Printing Office  
Washington D.C. 20402

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## About the User's Guide

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The TView Micro User's Guide is designed to help you to quickly and easily connect the hardware and install the software for this product. The guide is divided into the following chapters:

**Chapter 1: Introduction:** *which describes the key features and functionality of the product and some of its many uses. The chapter also discusses the notation conventions used in the guide.*

**Chapter 2: Installing the Hardware:** *which describes the information you should know before installing and connecting the TView Micro hardware, and the steps required to perform the installation.*

**Chapter 3: Image Control:** *describes the location and functions of the control buttons on the TView Micro unit and the auto-save memory function. It also describes the steps involved in configuring your PC or laptop video output.*

**Chapter 4: Tuning Your Television:** *this chapter describes the methods you can use to tune the image on your television.*

**Chapter 5: Troubleshooting:** *describes possible problems that you might encounter and ways to solve them.*

## Notation Conventions

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This user's guide uses the following conventions to specify certain types of information.



**Warns you about potential problems and hazards during the installation or use of the product. Read these warnings carefully, and be sure you understand how they relate to the installation procedures before proceeding.**

*Note: Points out important or useful information.*

## Contact Information

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To get information on the reseller nearest to you, to order replacement parts, or for technical support contact one of the following:

Focus Enhancements  
Worldwide Headquarters  
1370 Dell Avenue  
Campbell, CA

Customer Service	800-338-3348 (U.S. Only)
Technical Support	408-370-9963

**On-line:**

URL : <http://www.FOCUSinfo.com>

e-mail: [info@FOCUSinfo.com](mailto:info@FOCUSinfo.com)

# Chapter 1

## Introduction

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The TView Micro converts the VGA output from your computer into video that can be displayed on a television or recorded to a VCR. TView Micro automatically detects VGA, SVGA, and XGA resolutions and synchronizes them with your television. The result is a high quality, flicker-free television display from your computer.

## Features

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The TView Micro includes the following features:

- Contains the industry leading FS 400 Chip which provides the best possible resolution for PC-to-TV scan conversion
- Plug and play pure hardware design
- Support for 640 x 480 800 x 600 and 1024 x 768 resolution at frequencies up to 152Hz
- Supports NTSC or PAL systems ( Two versions sold separately)
- Supports Composite and S-Video
- Manufacture default reset
- Power consumption from PC's keyboard or USB port
- Compatibility with any size television monitor (NTSC/PAL) with an RCA (composite), S-Video input connection (Pending purchase of NTSC or PAL unit)



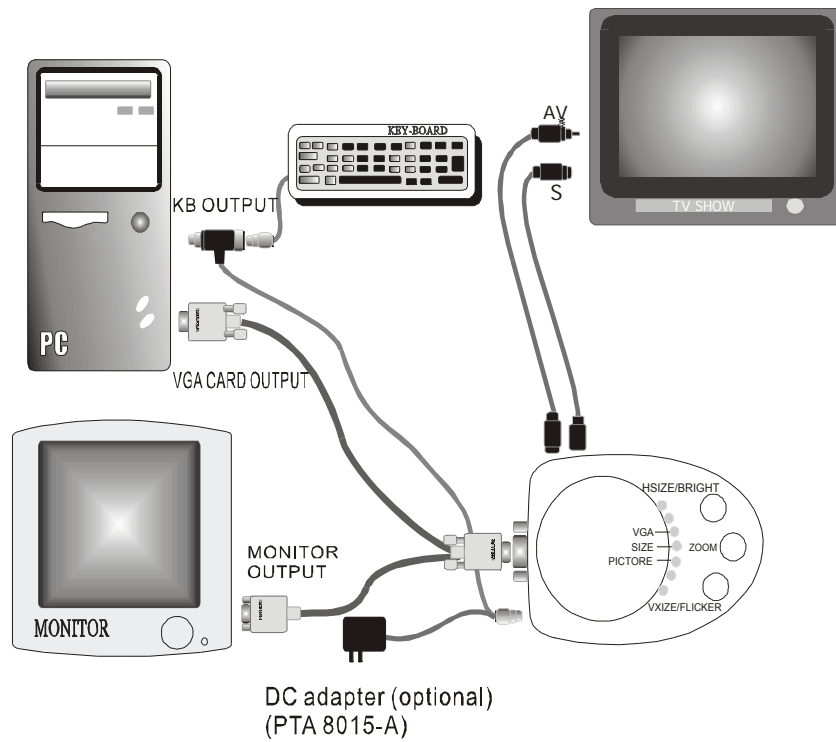
- Works with multiple platforms including Mac OS 7.1 or higher, Microsoft Windows 95, 98 , NT, 2000 and ME
- 8 Levels of Brightness Control along with 8 Levels of Sharpness and Flicker Filter
- 8 Levels of Over/UnderScan and Horizontal/Vertical Scan
- EE-ROM auto save TV-Position and Size
- Zoom/Pan and freeze/unfreeze
- 2D Flicker Filter with 8 Levels
- Auto power on/off
- VGA to SCART adapter for PAL version

## Modes of Operation

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The TView Micro has ability to operate in three separate modes:

1. Presentation Mode: Display the same image on your computer
2. Television Only Mode: Use the television as your only display.
3. Video Record Mode: Record your video image directly to videotape.



**Figure 2-1: Connecting TView Micro to the Television & Computer**

Note: You have the option to use either the USB or PS2/AT power cables, which are both included inside. The DC adapter is not included but can be purchased through our customer service.

## **Suggested Uses for the TView Micro**

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The TView Micro can be used for many purposes. For example:

- Bring sales or other multimedia presentations from a laptop to a large TV
- Create training tapes or outfit a training room
- Demonstrate a new software package using a large screen TV
- Project computer games onto a TV screen
- Cruise the Internet on a TV
- Conferencing via TV
- E-Mail
- Collaborating with others on computer-based projects
- View DVD movies from your computer on your TV

## Specifications

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**Table 1: TView Micro Specifications.**

<b>Computer Compatibility</b>	<ul style="list-style-type: none"><li>• Multiple platforms include Mac OS, Windows 95, 98, 2000 , ME &amp; XP along with any computer with a VGA output</li></ul>
<b>Television Compatibility</b>	<ul style="list-style-type: none"><li>• Works with any size television monitor (NTSC or PAL) with an RCA (composite), S-Video input connection. For television receivers or televisions without composite or S-Video inputs, an RF Modulator is required (Radio Shack #15-1283)</li></ul>
<b>Color Modes and Resolution</b>	<ul style="list-style-type: none"><li>• Supports up to 16,777,216 colors (24-bit), and up to 1024 x 768 152Hz</li></ul>
<b>Power Supply</b>	<ul style="list-style-type: none"><li>• Powered by keyboard or USB port</li></ul>
<b>Unit Weight</b>	<ul style="list-style-type: none"><li>• 10.9 ounces (withcables)</li></ul>
<b>Unit Dimensions</b>	<ul style="list-style-type: none"><li>• 4.5 cm x 3cm x 3.5 cm</li></ul>

## Chapter 2

### Hardware Installation

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This chapter describes the information you should know before installing and connecting the TView Micro hardware, and the steps required to perform the installation.

#### System Requirements

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Before installation, the following are system requirements for the operation of the TView Micro:

##### **IBM (or compatible)**

- Personal or multimedia computer with a 486 or higher processor
- Microsoft Windows 95, 98, NT, 2000, ME & XP
- VGA, SVGA, or XGA desktop resolution

##### **Macintosh (or compatible)**

- Macintosh Performa or PowerMac with a 68020 or higher processor
- MacOS System Software 7.1 or higher
- VGA, SVGA, or XGA desktop resolution

*Note: In order to see the video output on both the computer monitor and TV simultaneously, you will need to be using a monitor with a VGA compatible input connector. If your monitor is larger than 14", it must be multisync (capable of running at various frequencies). Refer to your Macintosh documentation if you have any questions Macintosh documentation if you have any questions regarding the type of monitor you are using.*

- A TV/monitor, VCR or any video device that can display or record NTSC or PAL video.

## **Checking the Packing List**

Check the packing list that is included in this manual. Compare the list with the equipment you have purchased. Be sure that you have received everything that is on the list. If anything is missing, contact FOCUS Enhancements Customer Service department by calling 1-800-338-3348.

## **Packing List**

Your TView Micro includes the following items:

- TView Micro (NTSC or PAL version sold separately)
- Keyboard power cable (PS2/AT)
- 1 S-Video and 1 Composite video cable (connected to unit)
- User's guide and QuickStart guide (on CD ROM)
- DC Power Adapter (not included but optional)

- USB power cable
- VGA to SCART video adapter (included internationally only)

## **Inspecting the Equipment**

Before installing and connecting the hardware, inspect it for any damage, which may have been incurred during shipment. Perform a thorough inspection, looking for dents, scratches, or loose parts. Look for anything that appears unusual or out-of-the ordinary. If any of the equipment is damaged, contact FOCUS Enhancement's Customer Service department by calling 1-800-338-3348.

## **Connecting the TView Micro to an IBM PC or Macintosh Computer**

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This section describes the steps to connect your TView Micro to a television or VCR. The following sections describe how to connect to IBM PCs, Macintosh PCs, IBM PC laptops and Notebooks, and Macintosh PowerBooks.



Notes: 1. Before performing the steps to connect the TView Micro to a laptop computer, you must turn on the external video connector. This is accomplished by using a particular key sequence on the keyboard (for example, FN + F11) or through the BIOS setup program. Refer to your laptop owner's manual to determine how the external video connector is turned on.

2. Ensure that you are using a Macintosh PowerBook computer that has a connector for an external monitor.

**Perform the following steps to connect the TView Micro to a PC or Macintosh Desktop or Laptop:**

1. Turn the computer and monitor off.



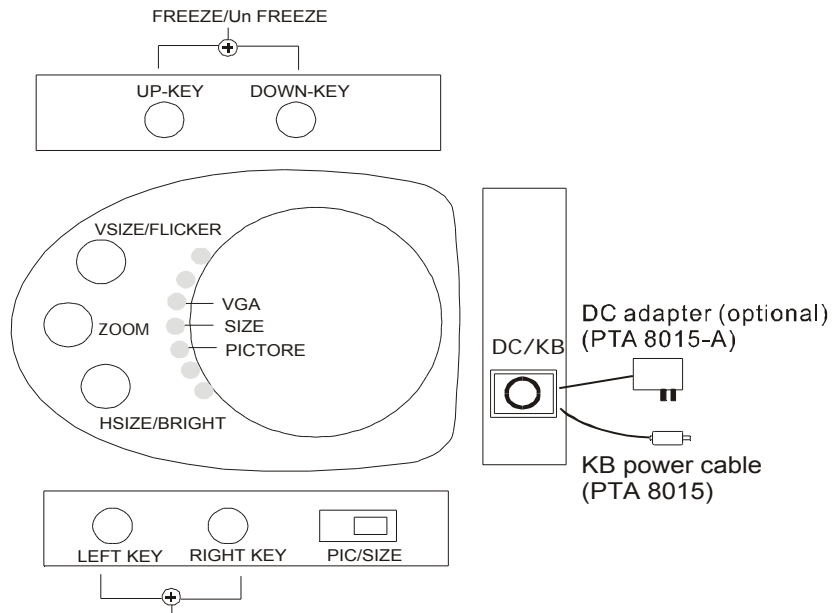
**The computer must be off when connecting the TView Micro. Connecting with the power on could result in static damage to your computer and video equipment.**

2. Disconnect the current monitor cable from the "monitor out" port at the rear of the computer.
3. Locate the Video In cable attached to the rear of the TView Micro unit.
4. For an IBM PC or compatible, connect the cable connector located at the other end of the VGA Input

cable to the "monitor out" port at the rear of the computer, the same port from which you disconnected the current monitor cable in step 2. For an older Macintosh model or compatible, you may use a Macintosh video adapter, connect the other end of the VGA Input cable to the Macintosh Video Output port located at the rear of the computer, the same port from which you removed the current monitor cable in step 2.

5. Connect the male end of your computer's monitor cable to the female connector on the VGA input cable.
6. Connect the composite or S-Video cable from the TView Micro to the TV.
7. Connect the PS2/AT power cable to the keyboard port and the other end to the PC keyboard port. (Option to use the USB power cable and connect it to the USB port instead)
8. Once complete you will be able to view the PC monitor on your TV.

## 2.1 TView Micro OUTLINE DESCRIPTION



Note: You have the option to use either the supplied keyboard PS2/AT or USB power cable. You can purchase the DC power cable through our customer service.

## Connecting the TView Micro to a Television

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The next step in connecting your system is to connect it to the television. (If you are planning to connect to a VCR, see "Connecting to a VCR" below.) There are two possible ways to connect to a television:

- Using a composite video connection
- Using an S-Video connection

### Composite Video Connection

Composite video is a connection type used by most televisions, VCRs, laserdisc players, and certain LCD panels. The connectors on a composite video cable have an RCA-type plug. The plug has a long metal pin projecting from its center and plugs into the composite video in port at the rear of the television.

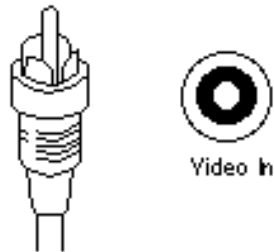


Figure 2-3: Composite Video Connectors

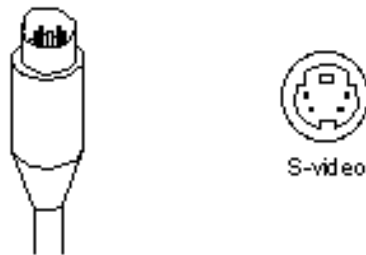
To determine if your television supports composite video, look for a port on your television that matches the composite video out port at the rear of the TView Micro unit.

*Note: The composite video port on the television may or may not be labeled "video in."*

### **S-Video Connection**

S-Video is a high-quality video connection used by some video cameras and VCRs. The connector on an S-Video cable has a round plug with several small metal pins. It plugs into the S-Video output port at the rear of the TView Micro unit.

*Note: The S-Video connection is a newer video standard. This type connection improves color, clarity, and resolution. It is recommended that if the S-Video connection is available it be used.*



**Figure 2-4: S-Video Connectors**

To determine if your television supports S-Video, look for a port at the rear of the television that matches the S-Video output port at the rear of the TView MicroUnit.

*Note: The S-Video port on the television may or may not be labeled "S-Video in."*

**To connect the TView Micro unit to your television, perform the following steps:**

1. Connect one end of the supplied composite video cable to the "Comp Video" port located on the back of the TView Micro unit, or connect the male end of the S-Video cable to the port on the back of the TView Micro. Connect the other end of the composite cable or S-Video cable to the Comp Video in or S-Video in port at on the television.
2. Turn the television on.
3. Turn the TView Micro on.
4. Turn your computer on. If the cables have been connected correctly, the image from the computer monitor should now appear on the television screen.

When you are looking at the television to make these connections, you may see an input labeled ANT IN. This input is used by cable TV companies and uses a different type of video than that used by TView Micro. It is not possible to connect directly to this input. If this is the only

input available, and you do not have a VCR, this input can be used with an RF modulator. See below for further information.

*Note: Because the port may not be labeled, you will need to match the port to the connector you are using.*

## **Connecting to the Television Using an RF Modulator**

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If you do not have a television with composite video or S-Video, you will need a special adapter called an RF Modulator. This device converts the Composite Video signal from the TView Micro unit to an antenna signal. The RF Modulator is not supplied.

*Note: When using a RF Modulator, the TV may have to be set to a particular channel (for instance, 3 or 4) to accept the TView Micro video. Or, in some cases, you may have to specify input using the TV's on-screen-programming feature. If you are unsure about how to set your television to accept external video through the Antenna In, refer to the television owner's manual.*

**To connect the TView Micro to your television using the RF Modulator, perform the following steps:**

1. Connect the RF Modulator to the coaxial input at the rear of the television.
2. Connect the composite video cable from the unit to the RF Modulator's Composite Input at the rear of the television.
3. Plug RF modulator into wall outlet or surge protector
4. Turn your computer on.
5. Turn the TView Micro on.
6. Turn the television on. If the cables have been connected correctly, the image from the computer monitor should now appear on the television screen.

**Connecting the TView Micro to a VCR**

In certain configurations, the video will be run through a VCR. Therefore the unit must be connected to the VCR. By connecting the TView Micro unit, you will also be able to record the computer screen to videotape.

**To connect your TView Micro to a VCR, perform the following steps:**

1. Connect the other end of the composite cable or S-Video cable to the port at the rear of your VCR labeled "Video Input" or "AUX-IN," "AV-IN," or "S-



VIDEO IN."

2. Turn on the VCR.
3. Turn on your television and tune it to channel 3 or 4.
4. Turn the TView Micro unit on.
5. Turn the computer on.
6. Find a button on the front of the VCR called "Line," "TV/Video," "Video Input," or something similar. Press the button. If the cables have been connected correctly, the image from the computer monitor should now appear on the television screen.

*Note If your VCR does not have a button specifying video-in, use your VCR's remote control to find an on-screen programming system. Using the programming system set the VCR to receive external video. If you are unsure about how to do this, refer to the VCR owner's manual.*

## Chapter 3

### Image Control

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This chapter describes the location and functions of the control buttons on the TView Micro Unit. It also describes the steps involved in configuring your desktop or laptop video output.

#### Screen Controls

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If you look at the top of your TView Micro unit, you will notice three buttons on top and two on the left and right side of the unit. These buttons are used to perform various adjustments to the unit's video output. The following descriptions outline the functions controlled by each of these buttons.

**The buttons on top of the TView Micro perform the following functions:**

- **Flicker/ VSize Button:** When the "PIC/SIZE" switch on the right of the unit is in the PIC position, this button is used to toggle through eight flicker reduction modes. Click the button until the image on your television is stable and not flickering. When the

“PIC/SIZE” switch on the right of the unit is in the Size position, this button is used to size your computer’s screen vertically to fit the television screen.

- **Zoom:** When you choose to click on the Zoom Button (Button 2) you can use the “Up & Down” and “Left & Right” position buttons to move horizontally and vertically bit by bit throughout the entire screen in zoom mode.
- **Bright/ HSize:** When the “PIC/SIZE” switch on the right of the unit is in the PIC position, this button is used to adjust the brightness of the image. When the “PIC/SIZE” switch on the right of the unit is in the Size position, this button is used to size your television screen horizontally to fit the television screen. Pressing the “HSIZE” button incrementally scrolls the entire image left and right on the TV. When the image reaches the left or right of the screen, it cycles around to the middle of the screen.
- **Screen Height Control:** Use the “Up” “Down” buttons on the left side of the unit to control the screen’s height on your television. Pressing these buttons allows you to size your computer screen vertically to fit the television screen.
- **Screen Width Control:** Use the “Left” “Right” buttons on the left side of the unit to control the screen’s width on your television. Pressing these buttons allows you to size your computer screen

horizontally to fit the television screen.

- **Default Mode:** Pressing the "Left" Key plus the "Right" Key at the same time will automatically set the Micro unit into a Default Reset mode.
- **Freeze/ Un Freeze Mode:** Pressing the " UP" Key plus the "Down" Key at the same time will automatically activate the function of Freeze/ Un Freeze mode.

### Auto-Save Memory Function

After you have changed the settings of the TView Micro, the changes are automatically saved to memory with the unit's auto-save memory function. Each set- up will be saved into EEROM, which means all settings will be saved even if the unit is powered off and on.

To restore all settings to their defaults, press the left and right key at the same time. When the buttons are released, all settings are returned to their defaults.

## **Changing Screen Resolutions**

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### **Windows 95, 98, NT, 2000, ME & XP**

**To change screen resolutions perform the following steps:**

1. Click on the "Start" button.
2. Choose "Settings" and go to the "Control Panel" submenu.
3. Double-click on the "Display" icon.
4. Click on the "Settings" tab.
5. Move the "Desktop Area" slider to the desired resolution.
6. IMPORTANT: Click on "APPLY" first, and then "OK."

### **Macintosh**

**To change screen resolutions, perform the following steps:**

1. Select "Monitors and Sound" from the control panel.
2. In the resolution area of the monitor's window, use the "Show" pull down menu.
3. Select "Show All."

4. Select the desired resolution.

## Configuring the Macintosh Monitor Mode

Most Macintosh PowerBook's allow you to configure the external monitor in two ways:

- **Mirror Mode** - The external monitor reflects whatever appears on the PowerBook screen.
- **Dual Monitor Mode** - The external monitor increases the size of the workspace, allowing you to drag windows or applications from one monitor to another.

*Note: Newer PowerBook's such as the 2400s and 3400s do not support dual monitor mode. When the TView Micro is connected to these models, it defaults to external monitor mode, and the PowerBook's internal screen is turned off.*

When the TView Micro is connected to the PowerBook, and the PowerBook is initially turned on, it defaults to the dual monitor mode. To ensure that the PowerBook recognizes the second monitor, select "Monitors" from the control panel. If two monitors are recognized, you will see two monitor icons.

### To activate the Mirroring Mode, perform the following steps:

1. Select "Monitors and Sound" from the control panel.

2. In the resolution area of the "Monitors and Sound" window, use the "Show" pull down menu.
3. Select "Simulscan."
4. Select the resolution with the word "Simulscan" in parentheses.

## Chapter 4

### Tuning Your Television

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This chapter describes the methods you can use to tune the image on your television.

### Using Your Television's Video Settings

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Picture quality varies from television to television. To obtain the clearest and sharpest picture from your television, it is important to spend some time adjusting the television's video settings. The following are some suggestions for tuning the video output you see on the screen.

*Note: The items listed below are general tips for all televisions. Most televisions have one or more of the controls listed. However, the results of adjusting these items depend on your specific television.*

*Note: Depending on the model of the television, the image is adjusted using buttons or on-screen programming. Check your owner's manual to determine how the image is adjusted on your television.*



## **Brightness**

The Brightness adjustment on the television adjusts the brightness levels of black areas of the picture. Raise or lower the brightness until the picture appears bright without a "blooming" effect. The sides of the picture should be straight, not curved or bowed.

## **Color**

The color adjustment on the television adjusts the intensity of the colors in the picture. Adjust the color control until the picture is clear and has a minimal amount of "color-bleeding." If the color is turned up too high, the color will be over-saturated.

## **Sharpness**

The Sharpness adjustment on your television adjusts the clarity of the edges around objects for the clearest picture quality. The general rule when adjusting sharpness is to turn it up anywhere from its middle to highest level.

## **Tint or Hue**

The Tint or Hue adjustment on your television adjusts the color of the flesh tones to more green or red. The most effective way to use this adjustment is to display row or column of colors side-by-side and then adjust them until the color appears correct to you.

## Chapter 5

### Troubleshooting

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This chapter describes possible problems that you might encounter and ways to solve them.

Problem	Possible Causes/Solutions
<b>No video from the TView Micro</b>	<ul style="list-style-type: none"><li>• Check the connection from the computer's video output port to the monitor in port at the rear of the TView Micro unit.</li><li>• Check the connection from the comp video out port or S-Video out port to the input on your monitor or VCR.</li><li>• Ensure that the TV or VCR is ON.</li><li>• Check the connection from the power supply. Is the TView unit plugged in to the keyboard or USB port</li><li>• Ensure that your television or VCR has been configured to accept auxiliary video input.</li><li>• Ensure that the TView Micro is connected to the appropriate video connector on your TV or VCR. At the TV or VCR end, the cable should be connected to the VIDEO, VIDEO IN, or AUX port.</li></ul>

<b>Picture Rolls</b>	<ul style="list-style-type: none"> <li>• Ensure that your secondary monitor and computer monitor size are supported by the TView Micro</li> </ul>
<b>Flicker, or other Distortion on your screen</b>	<ul style="list-style-type: none"> <li>• Use of a RF modulator may cause image quality problems. If at all possible, avoid those devices that convert the TView Micro signal into an antenna signal.</li> </ul>
<b>Colors are poor quality or non-existent</b>	<ul style="list-style-type: none"> <li>• Adjust the color and contrast controls on your TV.</li> <li>• Adjust the Video settings of the TView Micro</li> <li>• Use of a RF modulator may cause image quality problems. If at all possible, avoid those devices that convert the TView Micro signal into an antenna signal.</li> </ul>
<b>TV image overshoots or fails to fill the screen</b>	<ul style="list-style-type: none"> <li>• Use the TView Micro's horizontal and vertical controls to adjust positioning.</li> <li>• Adjust the Micro's horizontal and vertical sizing control to the appropriate setting.</li> <li>• Adjust the vertical and horizontal size controls on your TV.</li> </ul>
<b>Power Concerns</b>	<ul style="list-style-type: none"> <li>• Check power connections.</li> <li>• Possible power supply or TView Micro failure.</li> </ul>

<b>TView Micro Failure</b>	<ul style="list-style-type: none"><li>Inspect the TView Micro unit for signs of damage (i.e. broken pins, severed wires, etc.).</li></ul>
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## Returning a Damaged or Failed TView Micro Unit

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**To return a TView Micro unit, follow these steps:**

1. Contact FOCUS Enhancements Technical Support at 1-408-370-9963. A representative is available from 8:00 AM to 12:00PM & 1:00PM to 5:00PM Pacific Standard Time (PST). Explain the nature of the problem and any evidence of damage you may have found. The customer representative will either assist you with the specific problem or give you a Return Materials Authorization Number.

*Note: No goods will be accepted for warranty repair or return without an RMA number that is written on the outside of the package.*

2. Pack the TView Micro carefully. If possible, use the original shipping package. Send the package pre-paid and insured via United Parcel Service (UPS) or US Mail to:

FOCUS Enhancements  
ATTN: RMA# (*Your RMA Number*)  
1370 Dell Avenue  
Campbell, CA 95008

FOCUS Enhancements will repair or replace your TView Micro within 5-15 working days. For units not covered under the 1-year warranty, or where the warranty has been voided, we charge a minimum fee of \$90.00.









